- engagement ranges compared to ground-based systems. See Figure 1.
- Canard Rotor/Wing (CRW): An affordable, survivable air vehicle capable of VTOL that supports dispersed units in littoral and urban areas.
- WALRUS: A heavy-lift air vehicle with 500 tons of lift capability. This vehicle is envisioned to transport a unit of action from "fort to fight."

Graham also showcased these FCSenabling technologies developed by DARPA:

- Jigsaw: A LADAR sensor that can produce high-resolution 3-D data by combining information from multiple sensors and perspectives. This sensor provides "the eyes" for FCS platforms.
- A160 Hummingbird: A UAV with VTOL capability and a 2,000-mile plus range. The A160 concept will be evaluated for surveillance and targeting, communications and data

- relay and lethal and nonlethal weapons delivery.
- Unmanned Ground Combat Vehicle (UGCV): The UGCV program is developing vehicle prototypes that can negotiate obstacles, transport material and exhibit advanced endurance performance.

Global War on Terrorism (GWOT)

COL(P) Joseph L. Votel, Deputy Director, Information Operations, Office of the Deputy Chief of Staff, G-3, explained how S&T is helping to mitigate problems with improvised explosive devices in the field. Votel praised the acquisition community's REF for quickly getting tools into the hands of Soldiers. "S&T, combined with our training and intelligence communities, will help address the GWOT," Votel said.

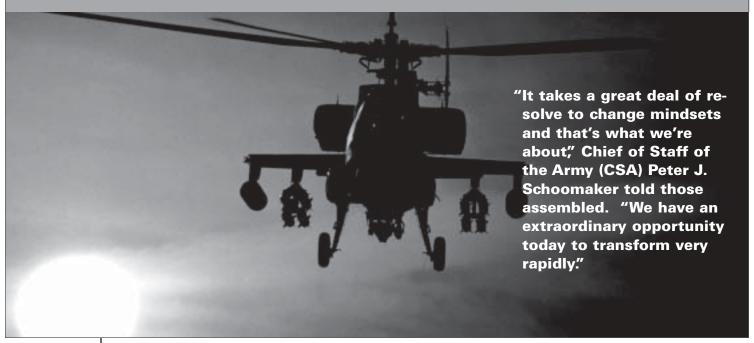
COL Tom Stautz, Agile Development Center Director, U.S. Army Research, Development and Materiel Command, also praised the REF for its timely procurement of items such as slat bar armor for the Stryker, an expedient armor kit for the Humvee and the Phraselator, a compact device that translates phrases from one language to another.

MAJ DENNIS ELLISON is an Operations Officer for the U.S. Army Acquisition Support Center's (ASC's) Strategic Communications Division. He has a B.S. in civil engineering from Savannah State University and an M.S. in materiel acquisition management from the Florida Institute of Technology.

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Transforming During Wartime — Making Tough Decisions for Army Aviation

MAJ Dennis Ellison and Meg Williams



Army were underlying themes during the Association of the United States Army (AUSA) Winter Symposium and Exhibition, March 3-5, 2004, Fort Lauderdale, FL. General officers who spoke pledged that the Army would be victorious in both areas and the urgency in their voices hung in the air more heavily than the salt spray from the Atlantic Ocean.

"It takes a great deal of resolve to change mindsets and that's what we're about," Chief of Staff of the Army (CSA) Peter J. Schoomaker told those assembled. "We have an extraordinary opportunity today to transform very rapidly."

Comanche Program

The CSA described progress on the 17 Army Focus Areas, one of which was particularly top-of-mind — Army aviation. Transformation had come swiftly and decisively to Army aviation when the Army announced Feb. 23, 2004, that it was canceling the RAH-66 Comanche helicopter program at the recommendation of Task Force (TF) Aviation.



CSA GEN Peter J. Schoomaker

"TF Aviation's intention was to look at what it would take to make the aviation program whole, not to end the Comanche program," Schoomaker said. "We want to make the aviation

program whole and be able to sustain and upgrade our current investments."

BG Edward J. Sinclair, Commanding General, U.S. Army Aviation Warfighting Center, Fort Rucker, AL, gave an extemporaneous presentation

on Army aviation earlier in the week at the AUSA Winter Symposium. He pointed out that the CSA had directed TF Aviation to conduct a holistic review of Army aviation, and TF Aviation responded with 115 items needing to be addressed.

TF Aviation proposed that money intended to purchase 121 Comanches and outfit them with Aviation Survivability Equipment (ASE) be transitioned to take care of these 115 problem areas. That money, approxi-

mately \$14.6 billion, would be used to:

- Purchase 796 new aircraft, including 80 new "L" and "M" model UH-60 Black Hawks.
- Modernize 1,400 other aircraft, including upgrading the Apache attack helicopters to Block III and upgrading Chinooks used by the U.S. Army National Guard and Army Reserve units to the Fox model.

- Outfit current aircraft with ASE.
- Purchase training munitions. Current stock will be depleted by 2007 at the current rate of use.
- Provide greater resources to Army unmanned aerial vehicle (UAV) programs, including purchasing UAVs to be used in Joint strategic initiatives.
- Transition to a multifunctional aviation brigade.
- Improve training, enhance flight simulators and increase flying hours.

"Overall, we're looking at two types of aviation platforms — intratheater aircraft and utility aircraft," Sinclair said. He further explained that there would be 8 UH-60 Black Hawks and

12 Chinooks in each aviation brigade to support each unit of action (UA). A major, a captain and several noncommissioned officers would lead these brigade aviation elements.

Killing the Comanche program was done based on assurances that the Comanche resources would flow back into other Army aviation programs. "The \$14.6 billion will make the aviation force whole and survivable and we will invest in UAVs and the technology base for the future,"

Schoomaker explained. "We received a commitment from the Secretary of Defense and [he] said that the Army would be allowed to keep that money. We spoke to President Bush about it and have achieved his sincere commitment. So far on Capitol Hill, we've received commitments from committees, and Senator Ted Stevens said that he personally would support that money going into Army aviation."



Modularity

Schoomaker talked about other Army Focus Areas as well. He noted that the Army has asked Congress for 30,000 more personnel and said that the Army plans to expand its 33 Active brigades to 48 brigade combat teams (BCTs) and reorganize the 15 enhanced brigades in the National Guard and Reserve into 34 BCTs. This will give the Army 77 modular BCTs that are ready to deploy when needed.

"This is a matter of using the million people we have in uniform to greater effect," said Schoomaker. "You might have seen that we have deployed 7 percent of Reserve units more than once in the last 14 years and that 93 percent of those Reserves have been deployed once or not at all in the last 14 years. We must make better use of that for which we are already paying."

Force Stabilization

The Army is moving 290,000 people a year, of which 90,000 are discretionary moves. The Army plans to take control of discretionary moves and stabilize people in units, especially at the larger installations. Professional development could be better staged, providing training for junior Soldiers through noncommissioned officer grade and junior officer corps through field grade for longer time on station. Developing young Soldiers and officers at the same location allows their families stability, their spouses to work and leadership strength to flourish. Schoomaker told AUSA attendees that there is an opportunity for the Army to transform itself now. "Transformation will take place during a time when there will be political pressure to

lessen the defense portion of the U.S. budget," said Schoomaker. "Yet, the Army has momentum as it fights this war, and we must use it to reset the force and convert to the UA and unit of employment. The window of opportunity is open, but it might close faster than we realize."

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Did You Know?

The 2004 Acquisition Senior Leaders' Conference is scheduled for Aug. 9-12, 2004, in Louisville, KY. This is an invitation-only conference. Throughout the week, attendees will interact with more than 300 senior acquisition professionals from Army Aquisition Corps headquarters offices, Army program offices, acquisition organizations, the Joint environment and elsewhere. The theme for this year's conference is "Army Acquisition Corps — Supporting the Fight, Improving the Force, Building the Future."

The conference will highlight technology transfer initiatives throughout Army acquisition programs and platforms that have received technology insertion that led to improved capability. International and joint capabilities will also be showcased. On Aug. 12, 2004, attendees will venture to nearby Fort Knox, KY, for live-fire exercise, equipment static display and demonstration area.

If you are interested in participating in either the demonstration or live fire at Fort Knox, or if you are planning to exhibit at the conference hotel, contact demonstration coordinator MAJ Jonathan Long at (703) 805-1239/DSN 655-1239 or via e-mail at jonathan.long1@us.army.mil.

If you have questions, contact Joan Sable at (703) 805-4357, DSN 655-4357 or joan.l.sable@us.army.mil.